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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,366	04/24/2001	Deborah A. Louis Wallace	SPC1115495	6571

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CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC  
1420 FIFTH AVENUE  
SUITE 2800  
SEATTLE, WA 98101-2347

EXAMINER

NGUYEN, TRONG NHAN P

ART UNIT PAPER NUMBER

2152

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/842,366

Applicant(s)

LOUIS WALLACE ET AL.

Examiner

Jack P. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 and 33-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 and 33-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to Applicant's amendment filed on 1/4/05. Claims 1-31 and 33-42 are pending. Claim 32 is canceled. Claims 38-42 are added. Therefore, claims 1-31 and 33-42 are being examined.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

**Claims 1-9, 12-15, 17-21, and 24-31 and 33-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Papadopoulos et al, 6,282,454 (hereafter Papadopoulos).**

As per claims 1, 19, 27 and 38, Papadopoulos teaches a system, apparatus, and method for providing information regarding the operation of a control system, comprising: a central processing unit (CPU is a component of web site); a Web server module (30, fig. 2) associated with said control system (32, fig. 2; programmable logic controller 'PLC' is a control system; PLC data is in non-markup format), said Web server module having a memory (38, fig. 2; dual port memory stores non-markup language data from PLC) operative to store a non-markup language Web site database defining a

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Web site (col. 4, lines 36-41, 61-65; the web server retrieves and stores non-markup PLC data in its memory); and a computer operative to receive non-markup language configuration data defining said Web site associated with said control system, to store said configuration data as said Web site database, and to transmit said Web site database to said Web server module (col. 3, lines 48-60; col. 4, lines 1-5; the application program (22, fig. 1) retrieves non-markup PLC data from the control system (6, fig. 1) for processing and storage; the application program then transmits the PLC data to the web server (20, fig. 1; web module is a component of the web server) in response to a client request); a second interface (16, fig. 1; network interface allows the web site to communicate with remote computers) for communicating with a remote computer (8, fig. 1) also coupled to said CPU and utilized by the CPU to receive requests for said web pages and transmit responses to said requests (col. 2, lines 37-40; col. 4, lines 1-5; client computer, using its web browser (10, fig. 1), accesses PLC (6, fig. 1) data via the web server (20, fig. 1) through the Internet (14, fig. 1)); in response to a request, dynamically generating a web page defined by the non-markup language configuration data stored as a non-markup language web site database that provides information regarding the operation of a control system (col. 2, lines 45-63; col. 4, lines 1-5, 30-35; in response to the request from the client computer, the web server retrieves non-markup PLC data from PLC system and dynamically converts the non-markup language data into markup language data (e.g., web pages) and sends the translated data (web pages) to the requesting device; the client device, using its web

browser, can access and control the PLC system via the web server from remote locations) .

As per claims 2-3, 20, Papadopoulos teaches Web server module is operative to receive a request for a Web page of said Web site and to dynamically generate a markup language Web page from said Web site database in response to said request and transmit the translated data to the client (col. 4, lines 1-5; web server retrieves and translates the non-markup PLC data to markup data (e.g., web page) and transmit the translated data to the requesting client device).

As per claims 4 and 24, Papadopoulos teaches the Web site database further comprises a security profile map defining security level and privilege information for one or more users, and wherein said Web server module is further operative to identify a user associated with said request and to determine if said user is authorized to receive said Web page based upon an entry in said security profile map associated with said user (Col. 4, Lines 11-21; web site verifies and authenticates users for accessing the system).

As per claim 5, Papadopoulos teaches Web site database further comprises data defining a Web page comprising a table for reading or writing the contents of a memory register contained within said control system (Col. 5, L20-29; web site contains tables for reading/writing data retrieved from control system).

As per claim 6, Papadopoulos teaches the system of claim 2, wherein said Web site database further comprises data defining a Web page comprising a non-text

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rendering of read or write data corresponding to contents of a memory register contained within said control system (C6, L5-10, L17-26).

As per claims 7-8, 25-26, 29 and 42, Papadopoulos teaches said request comprises a request for said Web page comprising a table and non-text rendering, and wherein said Web server module is operative to identify said memory register, to determine the contents of said memory register, and to create said Web page comprising a table containing said contents of said memory register (Col. 8, Lines 40-44; upon receiving a request from a client, web server retrieves PLC data from control system to store in its table and dynamically create a web page to send to the client device).

As per claims 9, 21, Papadopoulos teaches said Web server module is electrically connected to said control system controller through a backplane interface (col. 4, lines 21-24).

As per claim 12, Papadopoulos teaches said request comprises a hyper-text transport protocol request and wherein said request is received from a Web browser executing on said remote computer (Col. 4, Lines 1-5).

As per claims 13-14, Papadopoulos teaches said dynamically generated markup language Web page comprises a Web page identifying an alarm generated by said Web server module through the monitoring of data for said control system (Col. 10, Lines 1-7; client user can view the status event (e.g., alarm) of the control system via its browser software through the web site).

As per claim 15, Papadopoulos teaches said Web server module further comprises an Ethernet interface for receiving said non-markup language (e.g., PLC data) Web site database and said requests and wherein said dynamically generated markup language Web page may comprise a Web page providing information regarding the status of said Ethernet interface (Col. 4, Lines 55-58; web server uses Ethernet interface for communications).

As per claim 17, Papadopoulos teaches said dynamically generated markup language Web page comprises a Web page providing system administrator or specific user-allowed access that allows active browser session modification of said security profile privileges (Col. 4, Lines 11-21; user can update security parameters of the system as desired).

As per claims 18, 28, Papadopoulos teaches said Web server module is further operative to receive a plurality of said requests and wherein said dynamically generated markup language Web page may comprise a Web page identifying a like plurality of users connected to said Web server module and associated with said plurality of requests (Col. 3, Line 66 – col. 4, line 5; web site processes plurality of requests from plurality of users as required).

As per claim 30, Papadopoulos teaches said data defining said table is created by receiving a mapping of a text tag to said memory register and by receiving a selection of said tags and a request that said tag be displayed in said table (Col., 6, Lines 27-45).

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As per claim 31, Papadopoulos teaches said data defining said non-text rendering is created by receiving a mapping of a tag to said memory register and a request that said tag be displayed via said non-text rendering (Col. 6, Lines 46-62).

*nr* As per claims ~~32~~-33, Papadopoulos teaches the said configuration data comprises configuration data for said Web server module (Col. 4, Lines 11-24) and configuration data for said Web server module comprises an internet protocol address for said Web server module (Col. 3, Lines 48-50; client uses HyperText Transfer Protocol 'HTTP' Internet address to access web server).

As per claims 34 and 39, Papadopoulos teaches receiving non-markup language configuration data defining a Web site comprises receiving the selection of one or more of a plurality of defined Web pages (Col. 4, Lines 1-5).

As per claim 35, Papadopoulos teaches said plurality of defined Web pages comprises a security page (Col. 4, Lines 11-16).

Claims 36-37 are rejected for the similar reasons as claim 27.

As per claims 40-41, Papadopoulos teaches web server module configuration application interface includes a module reference, rack designator, lost designator and allows a user to add web page of web site (col. 8, line 65 – col. 9, line 7; users can control and modify the PLC system via the web server).

### ***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 10, 11, 16, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos in view of Sharood et al, 6,453,687 (hereafter Sharood).**

As per claims 10, 11, 16, 22 and 23, Papadopoulos does not show the Web server module is electrically connected to said control system controller through a serial or network interface. In an analogous art to the claimed invention, Sharood shows a module that is electrically connected to a control system controller through a serial or network interface (F2, E204 & E206, C5, L21-28). Hence, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and/or combine the teachings of Papadopoulos and Sharood by allowing a various communication channels (e.g., serial or network ports) to connect to the web server module to enhance the compatibility interfaces of the web server module with various devices.

### ***Response to Arguments***

Applicant's arguments filed on 1/4/05 have been fully considered but they are not persuasive.

Point 1: In the remarks, Applicant argues that Papadopoulos does not disclose or suggest, in the amended claims, "...using non-markup languages to define a web page...storing that non-markup language as a non-markup language web site

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database...generating a web site using the stored non-markup language web site database.”

Examiner traverses applicant's remarks. Papadopoulos does explicitly disclose the client, using a web browser (10, fig. 1), can access and retrieve non-markup language data (from programmable logic controller 'PLC' (6, fig. 1)) via the web server (20, fig. 1) (col. 2, lines 37-40; col. 4, lines 1-6; the web site (4, fig. 1), via its application program module (22, fig. 1), retrieves and stores non-markup data from the control system (6, fig. 1) in its memory and translates the non-markup data into mark-up format to transmit the translated data to the requesting client (8, fig. 1) over the Internet (14, fig. 1)).

Point 2: In the remarks, Applicant argues Papadopoulos does not disclose or suggest, in the amended claim, "...wherein the web server module is operative to receive a request for a web page of said web site and to dynamically generate a markup language web page from said non-markup language web site database in response to a request.”

Examiner traverses applicant's remarks. Papadopoulos does explicitly disclose the client device, using its web browser, can access (using HTTP and TCP/IP protocols) and control the PLC system via the web server from remote locations; in response to the request from the client computer, the web server retrieves non-markup PLC data from PLC system and dynamically converts or translates the non-markup language data into markup language data (e.g., web pages) and sends the translated data (web

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pages) to the requesting device; (col. 2, lines 45-63; col. 3, lines 50-55; col. 4, lines 1-5, 30-35).

The following arts cited but not used in the Office Action: US Pat 6,466,971; 6,523,696; 5,968,119; 5,991,813; 5,974,449; 6,253,232; 5,787,259

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P. Nguyen whose telephone number is (571) 272-3945. The examiner can normally be reached on M-F 8:30-5:00 PM.

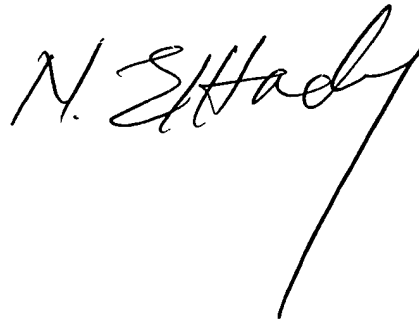
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn

A handwritten signature in black ink, appearing to read "N. S. Hadley". The signature is written in a cursive style with a long, sweeping diagonal stroke extending downwards and to the right from the end of the name.